

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|---------|---|---|------------------|---------|------------------|
| L1 | 197082 | (piezoelectric piezo-electric (piezo near electric) pzt) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:25 |
| L2 | 412950 | degradat\$4 ((property material element) near2 (limit threshold)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:34 |
| L3 | 839 | 1 with 2 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:28 |
| L6 | 1699995 | micro-actuator\$3 microactuat\$3 milliactuat\$3 milli-actuat\$3 microposition\$3 micro-position\$3 subactuat\$3 sub-actuat\$3 ((actuat\$3 position\$3 driver\$1 motor\$1 (displace\$4 adj element)) near3 (auxiliary second\$4 fin\$2 micro milli sub dual two "2" multi multiple plural piezo piezoelectric\$4 pzt bimorph piggyback\$3 (piggy adj back\$3) electrostatic\$4 (electro adj static) electro-static (((fast high wide large) near1 (resolution response bandwidth\$1 (band adj width\$1)))))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:29 |
| L7 | 1086498 | ((dis\$1 hard) near2 (drive apparatus)) HDA HDD DASD RAID platter (magnetic storage drive\$1 assembly) near2 (disk\$5 disc\$1 media medium device) (storage near2 drive\$1)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:29 |
| L8 | 100 | 6 same 3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:30 |
| L9 | 31 | 8 and 7 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:30 |

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| L10 | 232162 | break-down breakdown (break near down) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:34 |
| L11 | 2022442 | (limit threshold) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:34 |
| L12 | 788 | 10 with 1 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:35 |
| L13 | 8736 | 10 with 11 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:35 |
| L14 | 39 | 12 same 13 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:35 |
| L15 | 17 | 14 and 6 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:35 |
| L16 | 5 | 15 and 7 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:36 |
| L17 | 247 | 1 same 10 same 11 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:36 |
| L18 | 80 | 17 and 6 and 7 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:46 |
| L19 | 2383019 | speed | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:47 |

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| L20 | 1945307 | distance | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:48 |
| L21 | 1945314 | distance tracks-to-go (track near (togo to-go (to adj go))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 10:14 |
| L22 | 4373191 | determin\$3 calculat\$3 deriv\$3 estimat\$3 interpret\$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:50 |
| L23 | 140095 | 22 near3 19 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:50 |
| L24 | 129648 | 22 near3 21 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:50 |
| L25 | 6981 | (Bemf bemv beme (back near (emf emv eme electromotive (electro adj motive) electro-motive))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:51 |
| L26 | 2 | 23 same 24 same 25 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:52 |
| L27 | 5229 | 23 same 24 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:52 |
| L28 | 2315 | 7 and 25 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:53 |
| L29 | 6 | 27 and 28 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 10:12 |

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| L30 | 1846 | 19 with 25 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 10:13 |
| L31 | 378 | 22 with 30 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 10:13 |
| L32 | 1945308 | distance track-to-go (track near (togo to-go (to adj go))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 10:14 |
| L33 | 1945314 | distance track\$1-to-go (track near (togo to-go (to adj go))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 10:14 |
| L34 | 100 | 31 and 33 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 10:15 |
| L35 | 6 | 31 same 33 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 10:15 |
| L36 | 570020 | (actuator\$1 VCM (coil adj motor) HGA HAS (load adj beam\$1) ("e" adj block) positioner\$1) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 10:16 |
| L37 | 38680 | ((voice-coil (voice near2 coil) voicecoil coil) near2 motor) VCM | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 10:16 |
| L38 | 68 | 34 and (6 L36 L37) and 7 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 10:16 |
| S1 | 1086498 | ((dis\$1 hard) near2 (drive apparatus)) HDA HDD DASD RAID platter (magnetic storage drive\$1 assembly) near2 (disk\$5 disc\$1 media medium device) (storage near2 drive\$1)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:37 |

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| S2 | 1699995 | micro-actuator\$3 microactuat\$3 milliactuat\$3 milli-actuat\$3 microposition\$3 micro-position\$3 subactuat\$3 sub-actuat\$3 ((actuat\$3 position\$3 driver\$1 motor\$1 (displace\$4 adj element)) near3 (auxiliary second\$4 fin\$2 micro milli sub dual two "2" multi multiple plural piezo piezoelectric\$4 pzt bimorph piggyback\$3 (piggy adj back\$3) electrostatic\$4 (electro adj static) electro-static ((fast high wide large) near1 (resolution response bandwidth\$1 (band adj width\$1)))))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:59 |
| S3 | 6981 | (Bemf bemv beme (back near (emf emv eme electromotive (electro adj motive) electro-motive))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:38 |
| S4 | 570020 | (actuator\$1 VCM (coil adj motor) HGA HAS (load adj beam\$1) ("e" adj block) positioner\$1) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:38 |
| S5 | 38680 | ((voice-coil (voice near2 coil) voicecoil coil) near2 motor) VCM | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:38 |
| S6 | 6799033 | sens\$3 detect\$3 determin\$3 calculat\$3 deriv\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/22 09:49 |
| S7 | 7842610 | distance speed velocity position\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:42 |
| S8 | 3216291 | calculat\$3 estimat\$3 interpret\$4 measure\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:43 |
| S9 | 1648 | (S6 S8) with S7 with S3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:45 |

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| S10 | 767 | S3 with (S4 S5) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:46 |
| S11 | 383 | S10 with (S6 S8) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:46 |
| S12 | 243 | S9 same S10 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 10:19 |
| S13 | 504 | S1 and S2 and S3 and S4 and S5 and S6 and S7 and S8 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:47 |
| S14 | 383 | S10 and S11 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:48 |
| S15 | 145 | S13 and (S11 S12 S14) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:49 |
| S16 | 101 | S13 and S12 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:51 |
| S17 | 428740 | estimat\$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:51 |
| S18 | 39 | S16 and S17 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 09:52 |
| S19 | 187 | 360/78.05.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 10:00 |

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| S20 | 6 | S19 and S13 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 10:00 |
| S21 | 28 | (US-20020118483-\$).did. or (US-6487055-\$ or US-6512659-\$ or US-6310750-\$ or US-6268983-\$ or US-6515834-\$ or US-5189578-\$ or US-6501606-\$ or US-6538836-\$ or US-6473259-\$ or US-6351341-\$ or US-5991114-\$ or US-5390059-\$ or US-5719720-\$ or US-5757573-\$ or US-5377058-\$ or US-4853810-\$ or US-4605977-\$ or US-4843502-\$ or US-5796558-\$ or US-6552878-\$ or US-6501625-\$ or US-6366416-\$ or US-6362933-\$ or US-6267004-\$ or US-5943189-\$ or US-5537273-\$).did. or (US-5021906-\$).did. | US-PGPUB; USPAT | OR | ON | 2005/04/21 10:02 |
| S22 | 7 | (US-6421211-\$ or US-6507463-\$ or US-6268983-\$ or US-6088194-\$ or US-6351341-\$ or US-5719720-\$ or US-6052251-\$).did. | USPAT | OR | ON | 2005/04/21 10:03 |
| S23 | 11 | (US-20020080517-\$).did. or (US-5189578-\$ or US-6088194-\$ or US-6268983-\$ or US-6359758-\$ or US-6376964-\$ or US-6396667-\$ or US-6421211-\$ or US-6507463-\$ or US-6515834-\$ or US-6633458-\$).did. | US-PGPUB; USPAT | OR | ON | 2005/04/21 10:03 |
| S24 | 18 | (US-20020080517-\$).did. or (US-6289564-\$ or US-6088194-\$ or US-6515834-\$ or US-6310750-\$ or US-6268983-\$ or US-5796558-\$ or US-6487055-\$ or US-6351341-\$ or US-5719720-\$ or US-6512659-\$ or US-6507463-\$ or US-6452755-\$ or US-6421211-\$ or US-6404600-\$ or US-6396667-\$ or US-6376964-\$ or US-6359758-\$).did. | US-PGPUB; USPAT | OR | ON | 2005/04/21 10:10 |
| S25 | 11 | (US-20020186498-\$ or US-20020021525-\$).did. or (US-6538836-\$ or US-6342987-\$ or US-6731454-\$ or US-6721125-\$ or US-6104581-\$ or US-6043957-\$ or US-5936805-\$ or US-5448437-\$ or US-5291355-\$).did. | US-PGPUB; USPAT | OR | ON | 2005/04/21 10:04 |

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| S26 | 0 | S12 and (S21 S22 S23 S24 S25) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/04/21 10:19 |
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